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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/643,385

08/18/2003

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KOT-0080

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11/27/2007

EXAMINER

NGUYEN, ALLEN H

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

11/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>10/643,385</p>	<p>Applicant(s)</p> <p>UCHIDA ET AL.</p>	
	<p>Examiner</p> <p>Allen H. Nguyen</p>	<p>Art Unit</p> <p>2625</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date <u>see attached</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____</p> |
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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 11/17/2007, 12/29/2003 and 03/04/2004 has been considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagasaka (US 5,333,246).

Regarding claim 1, Nagasaka '246 discloses a network system (network 7, fig. 2) for processing image data and printing an image based on said image data (12, fig. 2), comprising:

a plurality of image-processing apparatus coupled to each other through a network (i.e., a plurality of information processing units loose connected via a network; see col. 2, lines 30-35, fig. 2);

an image printing apparatus coupled to said plurality of image-processing apparatus (a plurality of computers 6a to 6c and at least one printer 21; see col. 4, lines 26-27) through said network (network 7, fig. 2);

wherein each of said plurality of image-processing apparatus (a plurality of computers 6a to 6c, fig. 2) includes:

a rasterization processing section (The PDL parallel processing interpreter 2, fig. 2) to apply a rasterization processing to said image data (i.e., the process 210 is a client process for PDL translation, which uses the rasterize process 212; see col. 5, lines 46-47) so as to generate first rasterized pixel data (i.e., a primary translation processing 215 forms an intermediate code type file 10 suitable for computer processing from the source file 19 described in the PDL; see col. 6, lines 40-50, figs. 3-4, an intermediate code type file 10);

an image data transmitting section to transmit said image data to another image-processing apparatus (i.e., the computer 6a which generates a printing request distributes the PDL translation processing to all the computers 6a, 6b and 6c so that the picture element formation can be executed by the parallel processing of these plural computers; see col. 6, lines 29-32), in which said rasterization processing is applied to said image data so as to generate second

rasterized pixel data (i.e., the formed intermediate code 10 is divided into plural portions through a group detection processing 216, so as to be handled as if each divided portion is an independent intermediate code; see col. 6, lines 64-67);

a pixel data receiving section (a server process 211, fig. 5) to receive said second rasterized pixel data transmitted from said other image-processing apparatus (i.e., the respective portions of the divided intermediate code strings 230 are outputted to the network 7 via a group transmission socket 222, and then transferred to the respective distributed processing interpreter 2 of the other computers 6b and 6c. In practice, these data strings are received by the server process 211; see col. 7, lines 3-8, fig. 5);

a pixel data transmitting section (the client process 210, fig. 4) to transmit either said first rasterized pixel data or said second rasterized pixel data to said image printing apparatus as print-rasterized pixel data (see col. 7, lines 23-34, fig. 4);

wherein said image printing apparatus (21, fig. 37) includes:

a print-rasterized pixel data receiving section (303, fig. 2) to receive said print-rasterized pixel data, being either said first rasterized pixel data or said second rasterized pixel data (i.e., a part of these plural partial files is given to a rasterizer (212) of the information processing unit (6a) which generates a printing request, so as to be rasterized into picture element information; see Abstract),

through said network (network 7, fig. 2), in order to print said image according to said print-rasterized pixel data (i.e., a network device driver 303 of the printer 21 transmits the data strings received via the network 7 to an engine controller 302. The engine controller 302 rearranges the bit arrangement of picture element data in accordance with the physical specifications of the print engine 301, and outputs the rearranged printing picture element data to the print engine 301, so that a printing output 12 can be obtained; see col. 7, lines 42-50, fig. 2).

Regarding claim 2, Nagasaka '246 discloses the network system, wherein said pixel data transmitting section (The PDL parallel processing interpreter 2, fig. 4) transmits either said first rasterized pixel data or said second rasterized pixel data (i.e., the client process 210 of the computer 6a receives picture element data from the respective server processes 211 of the other computers 6b and 6c via the picture element data reception socket 223, and stores these data in an image memory area 229. Further, the parts of the divided intermediate code strings 230 are directly transferred to a direct rasterizer 212 and converted into picture element data; see col. 7, lines 24-30), which is acquired earlier as said print-rasterized pixel data completed as a whole, to said image printing apparatus (i.e., these picture element data are synthesized (or combined) by a picture element synthesize processing 220 to complete printing processing data; see col. 7, lines 30-35).

Regarding claim 3, Nagasaka '246 discloses a network system (network 7, fig. 2) for processing image data and printing an image based on said image data (12, fig. 2), comprising:

a plurality of image-processing apparatus coupled to each other through a network (i.e., a plurality of information processing units loose connected via a network; see col. 2, lines 30-35, fig. 2);

an image printing apparatus coupled to said plurality of image-processing apparatus (a plurality of computers 6a to 6c and at least one printer 21; see col. 4, lines 26-27) through said network (network 7, fig. 2);

wherein each of said plurality of image-processing apparatus (a plurality of computers 6a to 6c, fig. 2) includes:

a rasterization processing section (The PDL parallel processing interpreter 2, fig. 2) to apply a rasterization processing to said image data (i.e., the process 210 is a client process for PDL translation, which uses the rasterize process 212; see col. 5, lines 46-47) so as to generate rasterized pixel data (i.e., computer 6a constructs a part of the page-description language translation processing system. Here, "page-description language" implies a language used to describe the control procedure such as printed data arrangement and form, character information, etc. of printing units of dot-matrix type, electrophotography type, etc.; see col. 5, lines 15-20, figs. 2, 4, an intermediate code type file 10);

an image data transmitting section (the client process 210, fig. 4) to transmit said image data and a completed-part of said rasterized pixel data (i.e., the formed intermediate code 10 is divided into plural portions through a group detection processing 216, so as to be handled as if each divided portion is an independent intermediate code; see col. 6, lines 64-67, fig. 4), rasterization for which are completed by a time when a predetermined condition occurs in mid-course of said rasterization processing for said image data (i.e., the respective portions of the divided intermediate code strings 230 are outputted to the network 7 via a group transmission socket 222, and then transferred to the respective distributed processing interpreter 2 of the other computers 6b and 6c; see col. 7, lines 3-8, fig. 4), to another image-processing apparatus (i.e., each server process 211 of the other computer 6b or 6c receives the intermediate code data strings via a group reception socket 225, extracts the data portion by a group reception processing 227, and transfers them to a rasterizer 212; see col. 7, lines 10-15, fig. 5);

wherein said image printing apparatus (21, fig. 2) includes:

a rasterized pixel data receiving section (303, fig. 2) to receive said rasterized pixel data through said network (network 7, fig. 2), in order to print said image according to said rasterized pixel data (i.e., a network device driver 303 of the printer 21 transmits the data strings received via the network 7 to an engine controller 302. The engine controller 302 rearranges the bit arrangement of picture element data in accordance with the physical specifications of the print

engine 301, and outputs the rearranged printing picture element data to the print engine 301, so that a printing output 12 can be obtained; see col. 7, lines 42-50, fig. 2).

Regarding claim 4, Nagasaka '246 discloses the network system (network 7, fig. 2),

wherein, in said other image-processing apparatus (computers 6a, 6b, 6c, fig. 2), said rasterization processing is applied to a residual part of said image data so as to generate a residual part of said rasterized pixel data (i.e., in the information processing unit (6a) which generates a printing request, a client process (210) converts a source file (19) into an intermediate code file (10) and further divides the intermediate code file into a plurality of partial files executable in the rasterize processing, independently; see Abstract, fig. 2);

wherein said other image-processing apparatus transmits said rasterized pixel data to said image printing apparatus as an addition of said completed-part and said residual part (i.e., the remaining part of the plural partial files are distributed to the other information processing units (6b, 6c) via the network. In each of these other information processing units (6b, 6c), the distributed partial file is received by a server process (211), transmitted to the rasterizer (212) to form partial picture element information; see Abstract, fig. 2).

Regarding claim 5, Nagasaka '246 discloses the network system (network 7, fig. 2), wherein said image data transmitting section (the client process 210, fig. 4) transmits said image data and a completed in-part of said rasterized pixel data to a plurality of other image-processing apparatus (i.e., the client process (210) combines the picture element information returned from the other information processing units (6b, 6c) with the picture element information formed by the rasterizer (212) of its own unit, to form the entire picture element information. The entire picture element information is transmitted to a printing unit (21); see Abstract, fig. 2).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishikawa et al. (US 5,987,226) discloses printing system and method.

Kawamoto et al. (US 5,978,563) discloses print processing system and method.

Vatland et al. (US 6,091,507) discloses method and apparatus for printing a document over a network.

Chang et al. (US 2002/0097433) discloses method of operating an information apparatus and software for carrying out the method.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen H. Nguyen whose telephone number is 571-270-1229. The examiner can normally be reached on M-F from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571)-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AN

11/23/2007


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SUPERVISORY PATENT EXAMINER